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Fishery Leaflet 245

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BALLOON TRAWL CONSTRUCTION
(Long Island type)

By R. T. Whiteleather, Branch of Commercial Fisheries

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Several kinds of balloon trawls are used successfully along the Atlantic Coast for catching butterfish, porgy, weakfish, etc. These trawls are constructed much the same as the so called "flat" net which is used in trawling for flounder and fluke except that in the balloon trawl enough fullness is built into the wedge or tongue to allow the net a higher opening at the mouth. As a result of the higher opening the balloon trawl will take fish which are at times off the bottom a sufficient distance to allow them to escape a "flat" trawl.

Like any other fishing gear, balloon trawls vary considerably in accordance with the individual operator's ideas of the best design and construction to fit his particular circumstances. The trawl described on the following pages is one of the types used in Long Island waters by small dragger vessels usually about 35 to 45 feet in length. Larger vessels with greater propulsion power use larger balloon trawls, but the trawl specified herein is well fitted for use with the smaller type of vessel.

In constructing the balloon trawl attention should be given to getting it properly balanced and exactly symmetrical, otherwise it will not operate satisfactorily. Undoubtedly some experimentation will be necessary in determining the correct number of floats on the head rope and the right amount of weight on the foot rope to fit the individual case. The specifications shown cannot be exact in this respect and are given only as an approximate guide. In order that the trawl will "balloon" properly while fishing, the otter doors should be attached to the wings of the net by door leg ropes at least ten fathoms in length. A moderate size light door is recommended so that the strain on the head rope and the foot rope will not cause the net opening to flatten out when it is pulled through the water.

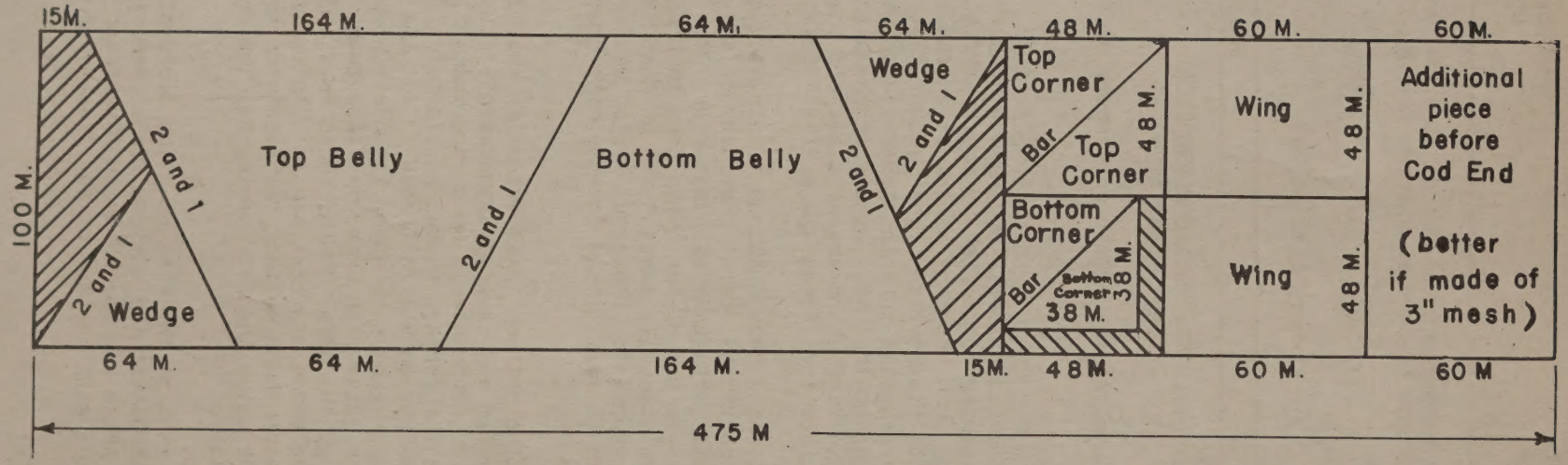
Towing speed as well as the size of otter doors affects the operation of the net and to obtain the maximum fish catching efficiency the right combination of these two variables must be found principally through experimentation with the net on the fishing grounds.

LONG ISLAND BALLOON TRAWL

Headrope about 39' Footrope about 45'

HOW TO CUT NETTING

(4" Mesh)



Head Rope - 24 Thr.
Foot Rope - 24 Thr.
Floats - Seven to Nine 8" Balls.
Weights - $\frac{1}{4}$" Chain 18" hung to 12" of Foot Rope
Door End Rope - 12' Laced on Meshes

Door Legs - 10 Fathoms Long

Hanging:
Round Meshes - 1 Mesh to 2" on Stretched Rope
Bar Meshes - 1 Mesh to 1 7/8" on Stretched Rope
Recommended Doors - 4' X 2'

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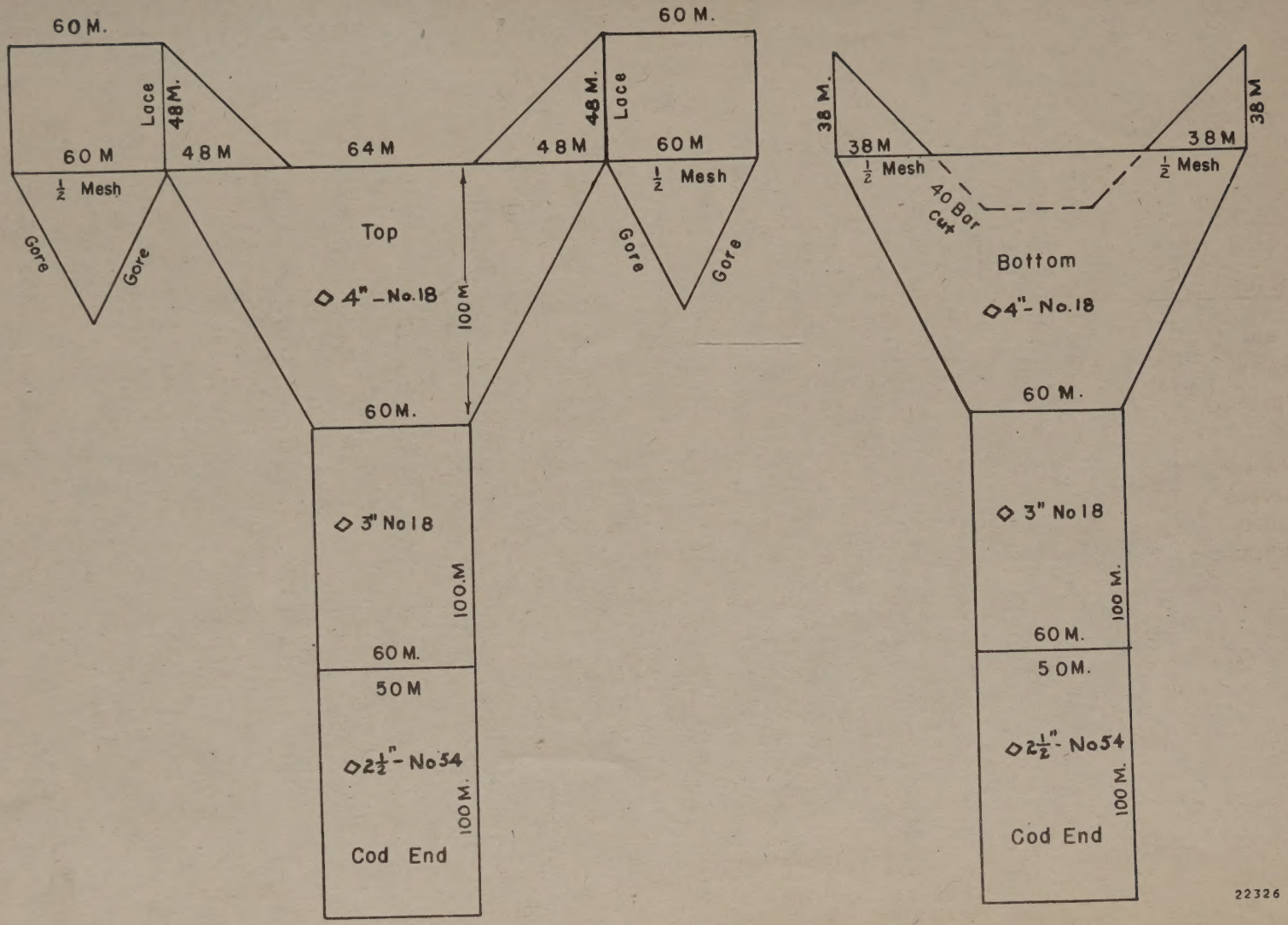
LONG ISLAND BALLOON TRAWL

HOW TO ASSEMBLE TRAWL



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